A

GUIDE

FOR

SELF PRESERVATION,

AND

PARENTAL AFFECTION;

OR

Plain Directions

FOR ENABLING PEOPLE TO KEEP

THEMSELVES and their CHILDREN

Free from several Common Disorders.

By THOMAS BEDDOES, M. D.

BRISTOL:

PRINTED BY BULGIN AND ROSSER, *Broad-Street*,

For J. MURRAY, No. 32, *Fleet-ſtreet*; and J. JOHNSON, No. 72, *St. Paul's Church-Yard, London.*

Price *Three-pence* each.

[Entered at Stationers'-Hall.]

PREFACE.

OUR power over Nature, according to the fine observation of Bacon, increases with our physical knowledge. The remark may be extended to moral knowledge; for as moral causes come to be more fully understood, we shall not only be better enabled to regulate our own minds, and the minds of those placed within the sphere of our influence; but the desire to exert it will, as in other instances, accompany the possession of the power.

Upon this principle, Natural History, which has so many recommendations besides, appears to be the study, best adapted to children. The habit it confers of observing animals would obviate the propensity, now so common, to torment them: Thus would the early association of pleasure with cruelty be prevented; and hardness of heart, which consists in a disposition to be agreeably affected by the sufferings of sensitive beings, or, at best, in indifference to them, probably become a very rare quality.

But the knowledge of the Natural History of our own species, would, I believe, be productive of far more beneficial consequences than that of any other branch of this extensive science. Parental affection, especially that of mothers, seldom requires to be strengthened, but it requires, in too many cases, to be directed. Now to give it a better direction is obviously, with regard to its objects, the same thing as strengthening it. Besides, there is nothing more amusing than to make observations, when we have any principles with which we can compare them. Hence, I conceive, Children must become, if not more interesting, at least more rationally interesting, did parents but understand the operation of those powers, which, though we are, all of us, every

moment exposed to them, affect children with tenfold violence, in proportion to the tenderness of their frame.

These reflections on Parental Affection, apply equally to Self Preservation. Both principles are ever active and alert. But both require a Guide; for as long as they are actuated by blind feeling alone, the chance whether they shall do harm or good, is pretty nearly equal.

But two considerable difficulties stand in the way of every attempt to disseminate information on this important subject. In the first place, the opinions of different practitioners of medicine on the influence of heat and cold are in some respects as diametrically opposite as they were during the contest concerning the treatment of the small pox. Now, as it would be a want of good faith, to lay down, for certain and approved, any disputed observances, it becomes necessary to make ordinary readers umpires in a controversy between professional men: and this can only be done by relating, with strict adherence to truth, the principal facts with which we are acquainted on the subject. These facts seem to me to form a body of evidence, such as no unprejudiced mind can resist. And, if so, it is not, in the present case, necessary, that any thing should take place like the occurrence in the fable, where the patient expires while the Doctors are squabbling.

In order to obviate the second difficulty, I have endeavoured to write in a style so familiar as to be intelligible to all readers and all hearers. My purpose is to give the poor, in particular, some ideas on the art of rearing children, and to teach those who are grown up how they may escape several serious disorders as well as some of those lighter ailments, which, in this fickle climate, often render the half of life uncomfortable. I have confined myself to a few topics, because I really doubt whether I shall be able to treat such a subject in a manner at once popular and instructive. If it should be thought that I have succeeded, it will be easy enough to go forward along the same track.

A

GUIDE

FOR

SELF PRESERVATION

AND

PARENTAL AFFECTION.

YOU can hardly imagine, my friends, what havock Death makes among the younger part of poor families almoſt all the world over, and in Britain, as well as elſewhere. Inoculation, it is true, has of late years ſaved thouſands of lives; for the natural ſmall-pox, whether it ſeizes on the old or the young, is a moſt unmerciful diſorder. In ſpite of inoculation, however, it is lamentable to think what multitudes ſtill die in the rearing. Infants are moſt liable to be cut off by accident or loſt by miſmanagement; and children the next; grown perſons are the moſt hardy, till old age or ſecond childhood comes on; when we are as tender as juſt after we are born.—But I muſt mention a few inſtances in order to give you a better notion of the great mortality, of which I am ſpeaking. You will then be ſatisfied what a ſerious matter this is for our conſideration; and you will hearken more heedfully to the directions, which I ſhall afterwards give you for the preſervation of your own health and that of your children.

You muſt know that in the Highlands of Scotland where the weather is exceedingly cold in winter and where the people live very hardly, it

is nothing uncommon for a mother who has borne TWENTY CHILDREN, not to have TWO alive. You may imagine then that if a poor woman in that country ſhould have a large family and rear but half her children, ſhe has extraordinary good luck indeed.—But you may think that as the Highlands of Scotland are a long way off, and as the living in that country is different from what it is with us, you need not trouble your head about what happens there. So I ſhall give you an inſtance nearer home. Now I can aſſure you that with the children of the poor in London the caſe is nearly as bad. In London half the children, taking all conditions together, die before they are five years old. But as the children of the rich ſeldom or never ſuffer for want of food or cleanlineſs, or of attendance when they are ſick, the loſs falls heavieſt on the families of hard-working people; and it is moſt likely that not leſs than one half of their children periſh before they are three years old.

Take one inſtance more and then I will come to the point. Laſt October I was determined to find out what the loſs in children might be in a ſituation different both from the Highlands and from London. So I made the enquiry at a little open well-aired town in Shropſhire, where the poor have the better chance of doing well as firing is plentiful and cheap. All the inhabitants of this town, who had no way of livelihood but the labour of their hands, were aſked how many children they had had in all, and how many out of them were dead.

What is exceedingly remarkable, as well as exceedingly melancholy to think upon, is this; it appeared from my inquiry, that the largeſt families had loſt moſt children in proportion. There were, I found, in this ſmall town thirty poor families, that had had ſix children, or upwards of ſix children, each. The whole number of children in theſe

these thirty families was 246
Out of which there were already dead, ... 90
that is, above one child in three. I say, *already* dead, because it is to be expected that many more will yet be cut off, before they attain the age of manhood. There were also in this town twenty-five poor families, that had had five children or under, each; the whole number of children in these twenty-five families was 102
Of these there were dead, ... 12
that is, not one child in eight.

These last children, it is very likely, were upon an average younger than the children of the larger families, and therefore they had had fewer years to die in: Yet, even making all reasonable allowance for this difference, the disproportion of deaths between the large and small families will still remain very great and lamentable, as it is an evident proof of the extreme misery large families must endure.

You may ask how this matter stands in Bristol and elsewhere. I cannot inform you. I have not heard that any strict enquiry has been made. So, you see, the old saying still holds good—*one half of the world knows not how the other half lives.* I wish it were otherwise, I confess; for the proper remedy can never be applied, till the evil is thoroughly understood.

Now which, think you, is the most likely, that there should be something wrong in our management? or that three parts in four of our fellow creatures should be doomed unavoidably to perish, before they come to their full growth, without answering any other purpose than to give trouble and endure pain? If this last be the case, then of all the things in this wide world, whether living or dead, the human frame is the worst contrived and executed.

executed. And I leave you to judge whether such a supposition stands to reason.—If then, our management of ourselves and our children be wrong in any material points, a stop may be put to this excessive mortality, for we should only have to find out what these points are, and to shape our conduct accordingly.

Being fully persuaded that by attending to certain easy practices, at present neglected, the health of children and grown people may be preserved and their lives prolonged; I design to give you some directions about these practices. It would be easiest to give simple directions. But I wish to make you comprehend the reasons, upon which they are founded. This, I am aware, will be difficult; but, it is well worth while to try, because people seldom do any thing well, except perhaps sums in arithmetic, unless their understanding be convinced. Then they go to work chearfully and execute properly what they set about.

Do not expect however, that I am to teach you how to doctor yourselves or others. It is impossible that you should understand the nature or the cure of disorders, unless you had first learned a number of things, each of which requires much study and time. Indeed, whenever a person, who does not understand these things, undertakes to meddle with physick, he stands a chance of poisoning himself or somebody else; and though (as is commonly said by the ignorant by way of excuse for their interference) their physic be such as if it does no good*, can do no harm, still by keeping away for a while a person of greater skill, death may be the

* These seemingly simple things are sometimes as dangerous to play with as edge-tools. The Hotwell water and asses milk are two simple as well as useful things. Yet persons who come here with a strong pulse, an hard tearing cough and spitting of blood withal, often find to their cost how mischevious they are, when unadvisedly used.

the consequence; for afterwards it may be too late for the most skilful to save the patient.

It is, in truth, usual enough for a pratling Doctor when the eldest son is ill, to pretend to make my Lady understand to a tittle what is the matter with him, and how his draughts are to drive the disorder out of his body. But this is merely in the way of trade. His only design is to give her an high notion of his skilfulness, in order that she may tell among her acquaintance, *what a fine man Dr. Sleeklips is!* As to herself, she is never a whit the wiser, after he has finished, than before he began, his harangue. Now as you cannot understand any more of the matter than my Lady, I shall confine myself to what it lies in your power to observe and avoid.

1.—You will be at no loss to comprehend how much a family must suffer which has neither a sufficient quantity of wholesome food, nor cloathing enough to keep out the cold in winter. The children especially become weak and contract lingering disorders, which wear them away by degrees; or else they are mowed down at once by the measles, sorethroat, fever, or any violent disorder, that may happen to be going about. To keep the children strong, and in good plight to stand such complaints, there is but one way. The father must be sober and industrious; and the mother learn to manage well. Much may be done by forecast; a crown laid out with care will go as far to supply the wants of a family as a pound laid out thoughtlessly. So it behoves a mother to consider well which is the best way to lay out her money before she parts with it. As to the father, I shall say nothing now of the shocking consequences of his drinking hard, as I have already set them forth at large in the *History of Isaac Jenkins*. Observe only, I beseech you, how much worse the family must needs fare, when the father is a sot, the larger

it is. For as more mouths are to be fed out of the pittance of his wages that is left for houſekeeping, the leſs will go to each mouth. For this reaſon, it is uſual to find more children dead, the more any poor couple has had. Thus where there have been as many as eight children in one family, you ſhall find commonly enough two or three or four dead; but take four families of two children each, and all the eight children ſhall often be alive and hearty, as I have already obſerved.

2.—But, in the ſecond place, poor people are apt, from over-fondneſs, to gorge their children at particular times, till they make them quite ill. *Enough, but beware of too much* is the true maxim of diet for all ages and all conditions. *Enough* is ſaid to be *as good as a feaſt;* but it *is better than a feaſt*, if the feaſt is to end in a ſurfeit. I have often had perſons (indeed they were generally rich perſons) complaining to me of being hot and reſtleſs all night and having a foul taſte in their mouths every morning. And when I came to examine, what was the reaſon of all this, I pray you? Why, they were ſeldom ſatisfied without eating more than their ſtomach could away with; ſo there lay almoſt conſtantly within them a fermenting maſs of undigeſted aliment; and no wonder this ſhould keep the body all night on the fret, ſo as to prevent the perſon from getting his natural reſt. No complaint, as every body knows, is now-a-days more common than wind in the ſtomach and bowels: All the food beyond what the ſtomach can digeſt runs into fermentation and produces wind, ſome kinds of food more, ſome leſs. Hence I have generally found that, when I could prevail upon people to be moderate in the uſe of a proper diet, this complaint was greatly relieved or went off altogether. Children bear to be crammed ſtill worſe than men and women; and where this practice is followed, they are very ſoon killed by miſtaken kindneſs.

And

And if ever you have obſerved how ſoon children are inflamed and made drunk with ſpirituous liquors, you may judge that if theſe liquors are only a ſlow poiſon to us, they are a very quick poiſon to them: Unleſs I could ſhew them to you, it would be impoſſible for me to make you conceive what pale, ſtupid, miſerable objects thoſe children are, whoſe parents give them gin or brandy; which is no uncommon practice in ſome parts of this kingdom. Stout, healthy children need no fermented liquor of any ſort; as to ſickly children, wine in ſmall quantities, or beer where the parents cannot afford wine, may be good for them; but they only waſte the life and ſtrength of others.

3.—"I once knew," ſays Dr. Franklin, "an "inſtance of four young men, who having worked "at harveſt in the heat of the day, with a view "of refreſhing themſelves, plunged into a ſpring "of cold water. Two died upon the ſpot, a "third the next morning, and the fourth reco-"vered with great difficulty." A ſummer ſcarce ever paſſes over our heads without our hearing of ſome perſons dying ſuddenly in conſequence of a large draught of cold water, when they are hot.

I believe the ſudden ſhock of the cold water occaſions a cramp of the muſcles and of the heart itſelf, ſo that it ſtops beating and will no longer drive on the blood. It is what is called the *conducting power of water for heat* that occaſions the cramp, to which ſwimmers are liable. You may underſtand what I mean by the *conducting power* from the following compariſon. Every black-ſmith, nay every perſon who has been in a black-ſmith's ſhop, knows that if a piece of red-hot iron be plunged in water, it will be ſooner quenched and cooled than if it be held in the air. This is becauſe the water carries away or *conducts* the heat faſter from the iron than the air does. Now as our body is alſo a good deal hotter than rivers and

and common ſprings, the water cools it faſter than air does ; and ſo occaſions cramps*.

Towards the cloſe of the meaſles I have known cramps and contractions of the hands and feet come on, when weakly, delicate people have happened to be ſuddenly cooled : and I am acquainted with a perſon, who, on moving a foot into a cold part of the bed is often ſeized with a pain in the bowels which I take to be the cramp.

This only proves that people ſhould be cautious how they ſuddenly chill themſelves. And as you may have often heard before of the danger of ſuch acts of imprudence, and may be very willing to believe it, I have been the ſhorter upon this head.

4.—But I ſuſpect you will be ſurpriſed to hear and ſlow to believe what I ſhall tell you next, which is, that coughs and croups and rheumatiſms, and I know not how many *inflammatory* diſorders beſides, that attack children and perſons in the flower of life, ariſe from ſuddenly paſſing out of cold into heat. This, I am aware, will ſeem a bold and an hard ſaying, becauſe it is contrary to what is commonly apprehended. But as it is, in my opinion, a point which can fully be proved, and as the life and health of thouſands and tens of thouſands depend upon conforming to it in practice, I muſt take ſome pains to make myſelf underſtood, and you muſt take ſome pains to underſtand me ; ſo, perhaps, by each moving half way, we ſhall meet in the middle.

You muſt obſerve, in the firſt place, that when we give the whole body or any part of it a holy-day,

* It requires great knowledge of medical ſcience to diſcover why cold produces cramp in theſe inſtances. So the following conjecture is deſigned for the conſideration of profeſſional people only. Does not the cold, by increaſing the irritability of the muſcles, occaſion them to become ſpaſmodically or permanently contracted from the ſame ſtimuli, which before produced only moderate contraction, alternating with relaxation?

day, it will be the freſher afterwards; I need not tell you how much briſker and fitter for buſineſs a perſon in health riſes after a good night's reſt. But there are ſome particular caſes, very curious, and ſuch as you may never have heard of. Thus a friend of mine has obſerved that if you draw your hat over your eyes, cloſe them for a minute or two, hum a tune in the mean time, and then open your eyes, the day-light will, for a ſhort time, appear brighter*: that is, the eye ſees better for reſting for a couple of minutes. The ſame thing holds of the ſtomach. Perſons who have been ſhut up in a coal work from the falling in of the ſides of the pit, and have had nothing to eat for three or four days, will be as much intoxicated by a baſon of broth as an ordinary perſon by three or four quarts of ſtrong beer. Beer or wine before dinner affects the head more than after. And a quantity of liquor that will make a perſon after eating only merry, ſhall make him mad if he has been faſting long. Accordingly in former days, when the Jeſuits wanted any deſperate act of wickedneſs to be done, they uſed to proceed in this manner. After pitching upon their man, they ſhut him up in a large chamber lighted with a ſingle candle, no bigger than a farthing candle, and hung with black cloth, on which were painted hell flames, and devils, and all manner of terrible ſhapes. This was called the *chamber of meditations:* and here the perſon was kept meditating and faſting for twenty-four hours; he was then worked up to the pitch, at which his employers wanted him, by an intoxicating draught; and, ſhocking as it is to tell, it is nevertheleſs true, that the errand on which he was ſometimes ſent after this preparation was Murder. If

* Phyſiologiſts may ſuſpect this to depend on the dilatation of the pupil, not on the accumulated excitability of the retina. But the light continues more vivid after the iris has contracted. In making this experiment, it is neceſſary not to think of viſible objects, and the leſs a perſon thinks the better.

If ever you have met with the *Narrative of the Mutiny on board the Bounty*, you muſt have obſerved over and over again what a prodigious effect ſpirituous liquors have upon men who are cold and hungry. Captain Bligh was ſent to carry a tree, called the *Bread Fruit Tree*, [becauſe it bears a fruit about as big as a child's head, which, when it is baked, ſomewhat reſembles white bread] from the South Seas to the Weſt Indies. When the ſhip was off Otaheite, part of the crew mutinied, and put the captain and almoſt all the officers on board the ſhip's boat with a very ſhort allowance of proviſions, and eſpecially of liquors; for they had only ſix quarts of rum and ſix bottles of wine for nineteen men, who were driven by ſtorms about the South Sea, wet and cold all the time, for near a month. Each man was allowed only a tea-ſpoonful of rum a day. But this tea-ſpoonful refreſhed theſe poor men, benumbed as they were with cold and faint with hunger, as much as twenty times the quantity would thoſe who are warm and well-fed. Had it not been for the ſpirit having ſuch power to act upon men in their condition, they never could have outlived the hardſhips they experienced.

Now nearly the ſame effect as ſhutting and ſhading the eyes has upon the ſight, or long faſting upon the ſtomach, nearly the ſame has cold air or cold water upon any part it touches: that is to ſay, the part being firſt more or leſs deadened by the cold, is afterwards more ſenſible to heat. Try an eaſy experiment and you will be convinced. Keep one of your hands in cold water for two minutes; then put both hands into warm water; and the hand which has been in the cold water firſt will feel much the warmer of the two. Or elſe, handle ſome ſnow with one hand, while you keep the other in your boſom, that it may be no colder than the reſt of your body; now bring both within an equal diſtance of the fire, and you will feel how much

much more the heat affects the cold than the warm hand. This would be a dangerous experiment, were the hand kept too long in the ſnow, or if the fire be too ſtrong. For in ſome countries where the cold is much greater than it ever is in England, it is common for people to have their toes and fingers and ears ſo froſt-bitten as to loſe all their feeling; and ſhould that perſon warm them at a fire, or put them into warm water, a violent inflammation is ſure to come on, and the part mortifies. So they are obliged to ſet cautiouſly about bringing the part back to its natural feeling; and how do you think they manage? they rub it hard with ſnow, by which means they recover it in the gentleſt and moſt gradual manner poſſible.

Now it is agreed on all hands that a common cold, attended with a running at the noſe and a cough, ſuch as young and healthy people are particularly ſubject to, is an inflammation. It is an inflammation of the ſmooth, moiſt ſkin which lines the noſtrils and goes down the wind-pipe into the lungs. When a perſon travels in cold weather, the air, every time he draws his breath, bruſhes his noſtrils, wind-pipe, and lungs; and juſt as is the caſe with the outward ſkin, it makes theſe parts more liable to be inflamed by heat. If you attend to what happens to you in coming out of the cold air into a warm room, you will firſt of all perceive a glow within your noſtrils and breaſt, as well as all over the ſurface of your body. Soon afterwards, more eſpecially if you drink warm or ſpirituous liquors, a diſagreeable dryneſs, or huſkineſs will be felt in the noſtrils and breaſt; by and by, a ſhort, dry, tickling cough will come on; you will perhaps ſhiver a little; this will make you draw nearer the fire and drink ſome more rum and water: But it will be all to no purpoſe. The more you try to heat yourſelf, the more chilly and uncomfortable will

will you become. For you are now in for a ſevere cold, which will be accompanied with a ſmart fever. I wiſh you with all my heart well rid of it, and ſafe from the complaints which ſevere colds are apt to leave behind them. Had you avoided the fire ſide and the heating liquors; and walked about in the cool, gone quietly to bed, or taken any means whatever to warm yourſelf gradually, all had been well; and you been perfectly able to go about your buſineſs the next day——After riding in the rain, till I have been thoroughly ſoaked, I have had a glow as if my ſkin had been on fire, merely from putting on dry clothes and from the exerciſe attending the change of dreſs. At the ſame time I have felt within my noſtrils the dryneſs and heat that is perceived at the beginning of a cold, which however I have always eſcaped by keeping cool and quiet for a time. I have known this exactly to be the caſe with others; and I have made the obſervation ſo often that I am certain it is right.

Elderly or weakly people may ſay that upon going out of a warm room into a cold air they begin to cough immediately. I have ſeen it often. But this cough is of quite an oppoſite nature to a common cold and the cough that accompanies it. You may underſtand this the better from another well-known fact. Let a ſtrong healthy perſon plunge over-head in cold water; on coming out, he will feel an agreeable glow, which is in truth a ſlight inflammation. Now let a weakly perſon do the ſame; and he will feel no glow whatever; but be chilly and have a dull head-ach all day afterwards*. Hence it appears that the young and

* If weakly perſons, as pale, chlorotic girls, are ever to be plunged in cold water, a doſe of bark with aromatics ſhould be given them firſt, in order to produce the glow. This practice would probably be uſeful where children, diſpoſed to be rickety, are dipped in cold water. This hint is for the practitioners of medicine.

and ſtout are diſpoſed to ſtrong inflammations, but the old and feeble to diſorders of an oppoſite kind.

But it does not always happen that a cold, or a pleuriſy (which may be conſidered as a cold of the moſt violent kind) is brought on by having the body firſt cooled or wet, and then heated by a fire or ſtrong liquors. An inflammatory ſore throat, an inflammation of the bowels, the croup in children, or the rheumatiſm may be the conſequence, according as this or that part may happen at the time to be diſpoſed to inflammation.

I have known a labouring man in a hard froſt come home periſhing with cold. He has immediately flown to the fire, kept cloſe by it till he went to bed, and in the mean time drank a quantity of hot ale. By morning he has had a rheumatic fever, which, being ill treated, has left him a cripple for life. And if being too ſuddenly heated can inflame a frozen limb till it mortifies, why may not heat, incautiouſly applied, produce that leſs violent inflammation, which takes place in rheumatic fever?

That pains of the limbs accompanied with fever, are actually produced when a perſon goes out of cold into heat, is a matter aſcertained by very careful experiment. One RICHARD EDWARDS of Liverpool, an healthy man, twenty-eight years of age, with black hair and a ruddy complexion, went into ſome freſh water, which was about the temperature of mild weather in winter, viz. at 40° by the thermometer. He continued in this water thirty-four minutes, and then went into a warm bath at 90 degrees, that is, rather below blood heat—Here for the firſt moments he felt warm, but his hands and feet were pained, and in two minutes, being ſtill in the warm water, he fell into a very violent ſhiver. The water was now heated 6 degrees, that is, it was made as warm as blood, but Edwards ſtill felt cold; he remained in the warm water about half an hour and the heat was

increaſed

increaſed 10 degrees above blood heat. He became very ſick and languid, a cold ſweat covered his face, and his pulſe grew very quick and feeble. He was, in conſequence removed into bed, but paſſed a feveriſh night, and, next day, had wandering pains over his body, with great weakneſs, reſembling the beginning ſtage of a fever.

Now it can make no difference whether a perſon paſs out of cold air or cold water into warm air or warm water; and I have ſeen perſons, who had long been riding in the cold or wet, experience feveriſh ſhiverings after coming into a warm room, ſitting near the fire, and drinking wine or ſtrong liquors. Theſe ſhiverings were the forerunners of a very ſevere cold or rheumatiſm.

It is not only warmth, ſuddenly applied, that will throw any part of the body after it has been ſtarved or benumbed, into violent action and bring on inflammation. Strong liquors will do the ſame; and ſo will a vigorous habit of body; juſt as in the caſe already mentioned, a ſtout healthy perſon will feel a glow in coming out of the cold bath, which a feeble perſon will not, in any degree, feel. But this is a nice queſtion, and perſons of the faculty would be very apt to differ in their opinions upon it. The rule, however, is plain and indiſputable; *when the whole body or any part is chilled, bring it to its natural feeling and warmth by degrees.* Heating it too ſuddenly will bring on *a cold*, (which diſorder ought to be called a catarrh) or an inflammation of the chilled part, or ſome inflammatory diſeaſe. *Chilblains*, as every old woman knows, are occaſioned by unwarily heating a cold hand or foot. Any breaking out, ſubject to itch, will itch much more violently, if the part where it is, be firſt chilled and then heated. The reaſon appears very plain from what has been already ſaid.

6.—When a *cold*, attended with a cough, is faſtening upon a perſon, what is proper to be done?

This

This ought generally to be known, as the poor cannot afford, and others at firſt ſeldom will take the pains, to ſeek advice. It is not right, then, in the beginning of a *cold*, to make the room where you ſit warmer than uſual, to increaſe the quantity of bed clothes, to wrap yourſelf in flannel, or to drink large draughts of piping hot barley water, boiled up with raiſins, figs, liquorice root and the like. This is the right way to make the diſorder worſe, as confining inoculated perſons in warm rooms tended to make the ſmall-pox more violent. Perhaps there would be hardly ſuch a thing as a bad cold, if people, when they find it coming on, were to keep cool, to avoid wine and ſtrong drink, and to confine themſelves for a ſhort time to a ſimple diet, as potatoes or other vegetables with toaſt and water. I have known inſtances of heat in the noſtrils, difficulty of breathing, with a ſhort, tickling cough, and other ſymtoms threatning a violent *cold*, go off entirely in conſequence of this plan being purſued. I have found the pulſe beat from 12 to 20 ſtrokes in a minute leſs, after a perſon at the onſet of a cold had continued quiet three quarters of an hour in a cool room. In October laſt (1792) I knew a gentleman, who was violently attacked by the influenza, a diſorder much reſembling a common inflammatory cold. He determined to try whether heat or cold beſt agreed with his complaint. So, after going to bed, he would keep the bed-clothes upon him for half an hour, and then for half an hour throw off all but the ſheet. When the bed-clothes were upon him, he was feveriſh; when they were off, he became cool, comfortable, and ſleepy. He tried the effect of heat and cold repeatedly; but at laſt while he was covered only with the ſheet, he was overtaken by ſleep, and in the morning awaked well, a little weakneſs excepted. He had no more fever or diſagreeable feelings.

While

While it was yet a matter of diſpute whether perſons in the ſmall-pox ſhould be kept hot or cool, the following among many other inſtances of a like nature happened. A child, highly feveriſh and delirious, was taken out of bed and held at an open North window in November, when the weather was very cold for the time of the year, and the ground covered over with ſnow. The child had been before carried about the room, which ſeemed to relieve its diſtreſs ſomewhat, but not entirely. It was kept at the window for an hour, within which time the rambling of the head or delirium went off, and the ſkin became cool. It was then put to bed and covered only with the ſheet; in conſequence it had the diſeaſe in a very mild manner, and inſtead of being blinded while it had the diſorder, and pitted and ſeamed all its life after, it had only twenty or thirty puſtules or pocks.

7.—It is unneceſſary to ſay any thing in praiſe of *cleanliness*, and *freſh air*. Both are allowed on all hands to be equally wholeſome and pleaſant. To ſhew how indiſpenſable freſh air is to children, I ſhall lay before you one example which ſets the fact in the very cleareſt light. In the *Lying-in Hospital* at Dublin, two thouſand nine hundred and forty four infants out of ſeven thouſand ſix hundred and fifty, died in the year 1782, within the firſt fortnight after their birth, that is, nearly every ſixth child. They almoſt all died in convulſions, of what the nurſes called *nine-day fits*, becauſe they came on within nine days after their birth. Theſe children, many of them, foamed at the mouth, their thumbs were drawn into the palms of their hands; the jaws were locked, the face was ſwelled and looked blue, as though they were choaked. This laſt circumſtance led the phyſicians to conclude that the rooms in the hoſpital were too cloſe; and hence that the infants had not a ſufficient quantity of good air to breathe.

This

This made them fall upon contrivances to change the air in the rooms, where the children were, frequently. Air pipes, 6 inches wide, were placed in the ceiling of each room. Three holes, an inch wide, were bored through each window frame; and a number of holes were made in the doors. Thus the rooms were kept ſweet and freſh; and the conſequence has been that not one child dies now, where three uſed to die. It appears from the regiſter that in the hoſpital

In 1758 out of 462, there died 54;
In 1759 420, ... 95;
In 1760 560, ... 116;
In 1777 847, ... 147;
In 1778 936, ... 127;
In 1779 1026, ... 146;

But after the alteration of the rooms, as to airineſs, the following were the numbers in three years:

In 1786 out of 1372, there died 51 in the hoſpital;
In 1787 1375, ... 59;
In 1788 1496, ... 55;

So that above twice as many died out of 560 before the alteration as out of 1496 afterwards.

All creatures, that are deprived of air fit to breathe, die in convulſions. Bad air is not, I know, the only cauſe why children are ſo often affected by convulſions; but it is probably a frequent cauſe. Fewer children, as far as I can find, die convulſed at preſent than formerly. This is becauſe the rich learn either from books or converſation with phyſicians, ſurgeons, or apothecaries, how neceſſary freſh air is to life and health. Hence they keep their houſes well aired; but the poor and ſervants are not made to comprehend this matter properly; ſo they themſelves and thoſe about them, from neglecting to open their windows, are drawing in a foul, tainted air great part of their time, by which means ſome diſorders are brought on and others rendered worſe than they would naturally be.

8.—The

8.—The rule that ought to be followed in cloathing is very ſimple. *Keep children cool, but do not ſtarve them.* Too great heat is of itſelf bad for children, but when they have been ſtarved beforehand, it is death, as I have already abundantly explained. By directing children to be kept cool, I mean that they ſhould be cloathed ſo as not to complain of being cold. Warmth beyond this makes them feeble and tender. The main difficulty in a poor family will be to find cloathing and bedding enough to keep out the cold by day and by night.

9.—Weakly people, whether juſt grown up or advanced in life, are commonly adviſed to wear flannel. The advice is right and proper. Flannel hinders the natural warmth of the body from flying off too quickly; or in other words it prevents the body from being too ſuddenly chilled. It alſo drinks up the moiſture of the ſkin and prevents chills in this way too.

But the misfortune is that the wearers of flannel often wear it, even in ſummer, next the ſkin, inſtead of over the ſhirt. By this they weaken themſelves ſtill more, and often keep themſelves in a conſtant fever. They alſo become ſo tender that the leaſt breath of air brings on a diſagreeable chill. I have known ſeveral perſons made ill by wearing flannel next the ſkin in warm weather, and cured by ſhifting it above the ſhirt—When thoſe who wear flannel next the ſkin are too lazy to take it off at night, as is frequently the caſe, it weakens them in ſtill a greater degree.—Though it is plain enough why flannel next the ſkin wears away the ſtrength, I am not ſure that every reader will underſtand me. But the fact is, that woollen frets the ſkin and thus exhauſts or drains the animal power. You may ſay perhaps that for a few days indeed, flannel feels uncomfortable, but the ſkin is ſoon reconciled to it; how then can it fret the ſkin afterwards?—You are to underſtand

underſtand that a part may be fretted or irritated, and the whole frame thrown thereby into diſorder without our feeling any thing painful or diſagreeable at the part. A thouſand inſtances of this may be ſeen every day. But one will ſerve for all. The heart in a fever ſhall be ſo fretted as to beat twice as often as uſual; and yet no pain is felt at the heart. The kidneys work ſometimes ten times as hard as at others, yet nothing is felt in our loins; only ſo much the more urine is paſſed. In like manner the ſkin is fretted and pricked by the points or piles of the woollen, and made to throw out more moiſture than the body can ſpare, at the ſame time that the very working of the veſſels to throw it out, imperceptibly wears away the ſtrength.

I ſhould conclude, for the preſent, with this caution againſt wearing flannel next the ſkin in Summer, if I did not ſtill ſuſpect that you would be ſtartled at the idea of *colds* or *catarrhs* being occaſioned by heat after a perſon has been ſtarved. I ſhall therefore give you the opinion of a much older phyſician than myſelf. This is Dr. WITHERING of *Birmingham*, who, in a letter I have received from him ſince Meſſrs. Bulgin and Roſſer began to print theſe directions, and which the Dr. allows me to publiſh, writes as follows: "A ſudden "change from cold external air to that in an "heated room is certainly a much more frequent "cauſe of inflammatory affections of the lungs, &c. "than has hitherto been generally ſuppoſed: it "is, I believe, the moſt general cauſe of taking "cold." So far the Dr. agrees with me: he differs from me a little as to the conſequences of going from an hot into a cold room, as you may have an opportunity of ſeeing, when I print the whole of his letter, which I ſhall do ſoon.—I can quote, beſides, the authority of another Phyſician of great eminence, who had better opportunities of judging of the effect of cold and wet

wet than moſt men. This is Sir JOHN PRINGLE, who attended the army, as phyſician, during one of our German wars. He was of opinion that rheumatiſms and catarrhs *(colds)* are not produced by cold or moiſture, becauſe he often ſaw numbers of men, nay, whole regiments, ſoaked to the ſkin, without rheumatiſm or catarrh being in a ſingle inſtance produced. Thus Sir John found abundant reaſon for believing that theſe diſorders are not produced by cold alone, as is commonly ſuppoſed. But he went no further. He did not ſee that the miſchief ariſes from heat or other *ſtimulants* applied too quickly afterwards.

Now, my good Readers, you may have taken notice, that there are three things which almoſt every perſon gives himſelf credit for underſtanding, whether he has taken any pains to make himſelf maſter of them or not. Theſe are 1. *The art of mending a dull fire:* 2. *Politics: and* 3. *Phyſic. Since, therefore, you will needs have your notions, right or wrong, concerning health and diſeaſe, I conſidered it as a commendable action to offer you ſuch as I believe to be juſter than thoſe you commonly entertain. I have often had occaſion to remark that thoſe very notions which medical people have long ſince caſt off as being erroneous, are at this moment current among others—to the no ſmall detriment of themſelves and their friends, as well as to the vexation and hindrance of thoſe who are called in to cure them, when they are ill.*

END.

Of the ſame Booksellers may be had, price 3d.

The Hiſtory of Iſaac Jenkins.

By the ſame Author.